## **ABSTRACT**

A method for estimating maintenance dates includes steps of obtaining one or more differences between detected values and maintenance values of parameters, and determining whether the differences are beyond predefined values. The method further includes a step of implementing or recommending an initiation of maintenance if any of the differences are beyond their respective predefined values. The method also includes a step of estimating the maintenance date according to the differences and variation values representing changes of the parameter per time unit for the tool, if none of the differences are beyond their respective predefined values. An apparatus for estimating maintenance date in this fashion is also presented. The apparatus includes a controller, a database, and a connection unit.